

The author discusses the "present status of the unit character conception" in a fashion both suggestive and stimulating. It is pointed out that, on the multiple factor hypothesis, the assumption of complexity in the germ plasm can be extended so as to interpret in Mendelian formulae any degree of variation, but the question whether the "end justifies such means" is raised.

The results of this investigation and the discussion which is given are pertinent to the present situation. It is emphasized that there are hereditary phenomena that do not lend themselves to a Mendelian notation in any way that is helpful from a practical point of view or even theoretically illuminating. It is an indication of the growing reaction against the extremely speculative character which the Mendelian notation has been given in the "presence and absence" and "multiple factor" hypotheses.

Meanwhile we must await a more intensive analysis of characters which are now considered qualitative as well as those which are clearly quantitative. The great service which Mendel contributed to the study of genetics in focusing attention on single characters, may through such studies reach fruition.

A. B. STOUT

## PROCEEDINGS OF THE CLUB

JANUARY 14, 1913

The annual meeting of the Club for 1913 was held at the American Museum of Natural History at 8:15 P.M. President Burgess presided. Twenty-five members were present.

The minutes of December 10 were read by Dr. A. Hollick and were approved as read.

J. K. Henry, 2024 Beach Ave., Vancouver, B. C., and F. W. Pennell, Wawa, Pa., were proposed for membership in the Club.

The reports of the various officers were then presented. The treasurer's report was referred to an auditing committee consisting of Dr. J. H. Barnhart and Prof. R. A. Harper, appointed by the president.

The secretary reported that fourteen meetings had been held during the year, with a total attendance of 271 and an average

attendance of 20. Thirteen persons have been elected to membership and thirteen resignations have been read and accepted. One death has occurred. Six lectures illustrated with lantern slides were delivered, at which the combined attendance was 139.

The editor reported that Volume 39 of the *Bulletin* contains 631 pages, 29 text figures and 45 plates and the total expense amounted to a little less than \$1,230. Six plates and one text figure were presented by Miss Broadhurst and eight plates were furnished by Miss Robinson. Parts 1 and 9 of Volume 7 have been reprinted as authorized. The editor's complete report was appended. In conclusion the editor extended his grateful acknowledgment to his associates on the editorial board and wished to thank Dr. M. A. Howe in particular for reading proof and his kindly coöperation. He further presented his resignation, which was accepted, and the secretary was directed to convey a vote of thanks of the Club to Dr. Dowell for his very efficient services for the past two years.

The editor of TORREYA presented a special report relating to the affairs of the publication of TORREYA.

On motion of Prof. R. A. Harper the president appointed the treasurer a committee of one to report the names of all persons and institutions on the mailing list of the Club's publications who were not actual subscribers or were not receiving authorized complimentary or exchange copies.

Formal reports of the finance committee and the program committee were not presented.

Dr. N. L. Britton, chairman of the committee on local flora, not being present, Dr. M. A. Howe, representing him, brought up the matter of publishing Mr. Taylor's work on the local flora. On motion of Prof. Harper the matter was referred to the board of editors with the request that a report be rendered within three months. Mr. Taylor reported that his work was about two thirds complete and that it would be ready for publication at an early date.

Mr. Sereno Stetson, chairman of the field committee, reported that twenty-five Saturday excursions had been conducted with an attendance of 110 people. His report was accepted.

Dr. W. Mansfield, delegate to the council of the Academy of Sciences, reported that the meetings of the council during the year had been of unusual interest. Miss Jean Broadhurst had been allowed a grant of \$200 from the Esther Herrman Fund.

The report of the committee on honorary members not being ready the chair requested the vice-president to call a meeting of the committee at an early date.

On motion of Dr. C. S. Gager the secretary was directed to convey the vote of thanks of the Club to the American Museum of Natural History for the use of the building during the year and for the many courtesies extended the Club.

The following officers were elected: *President*, Edward S. Burgess; *Vice-Presidents*, John Hendley Barnhart and Herbert Maule Richards; *Secretary and Treasurer*, Bernard O. Dodge; *Editor*, E. L. Morris; *Associate Editors*, Jean Broadhurst, Ernest Dunbar Clark, Alexander William Evans, Marshall Avery Howe, Herbert Maule Richards, Arlow Burdette Stout, Norman Taylor.

Dr. W. Mansfield was elected delegate to the council of the New York Academy of Sciences.

Meeting adjourned.

B. O. DODGE,  
*Secretary*

JANUARY 29, 1913

The meeting of January 29, 1913, was held in the laboratory of the New York Botanical Garden at 3:30 P.M. Dr. Marshall A. Howe presided. Twenty persons were present. The minutes of January 14 were read and approved.

Resignations from the following members were read and accepted: Gladys Pomeroy, Alice L. M. Wheeler, Alice R. Northrop, Mary F. Barrett, W. D. Hoyt, Elizabeth H. Kellogg.

The following committee appointments for 1913 were announced in a communication from President Burgess.

*Finance Committee*.—J. I. Kane,\* Robert A. Harper.

*Budget Committee*.—J. H. Barnhart, N. L. Britton, B. O. Dodge, E. L. Morris, M. A. Howe, H. H. Rusby.

*Field Committee*.—Serenio Stetson, with power to name his associates.

\* Died February 1, 1913.

*Program Committee.*—Mrs. E. G. Britton, Jean Broadhurst, C. Stuart Gager, F. J. Seaver.

*Local Flora Committee.*—N. L. Britton, Chairman.

*Phanerogams.*—E. P. Bicknell, N. L. Britton, C. C. Curtis, K. K. Mackenzie, E. L. Morris, N. Taylor.

*Cryptogams.*—Mrs. E. G. Britton, Philip Dowell, Tracy E. Hazen, M. A. Howe, W. A. Murrill.

The first number on the scientific program consisted of a paper by Dr. H. A. Gleason. Dr. Gleason stated that the present distribution of plants in the Middle West, from Ohio to Iowa, can not be accounted for satisfactorily by any modern environmental conditions. It is to be regarded as the culmination of a series of movements, begun at the close of the last glacial period, and continued until the recent advent of civilization. Three types of vegetation have taken part in these migrations: the coniferous forest, the eastern deciduous forest, and the western prairie. The movement of the coniferous forest has been simply northward and it has now left the region almost completely. Of the other two, four periods of migration may be recognized: (1) A period of dry climate accompanied by the extension of prairies far eastward. (2) A period with more favorable climate accompanied by the restriction of the prairie and the migration of the forest westward. During this period forests occupied a large proportion of the land in Illinois and Iowa, but probably did not extend so far west in Kansas and Nebraska as at present. (3) A period of prairie fires, following the advent of the Indians, during which the forest was driven back to the position which it occupied a century ago. (4) The last century, during which, with the cessation of prairie fires the forests commenced an extraordinarily rapid advance upon the prairie.

The second announced paper was presented by Dr. C. C. Trowbridge, of the department of physics of Columbia University. Dr. Trowbridge's paper on "Branch Movements of Certain Trees in Freezing Temperatures" will be published in the *Bulletin* of the Club. A brief summary of the results obtained in a series of measurements made during last winter and the present one is as follows:

(1) That branch movements occur in certain trees, due to temperature changes below the freezing point of water, and that in certain other trees no movement whatever has been observed. (2) That the movements amount to as much as 3 or 4 ft. differences in the distance from the ground to the ends of certain curved branches which are in length of the order of 20 ft., these changes occurring through a range of 30 degrees below freezing. (3) That little, if any, movement takes place above freezing point of water, and that the movements begin soon after the temperature remains at this point for several hours. (4) That there is a considerable lag in the movement of the branches behind the temperature changes, although a difference in the rate of change of temperature is followed at once by a difference in the rate of change of the position of the branches. (5) That the movements are practically of equal magnitude in December, January and February, that is, the seasonal change is not a ruling factor in this movement.

Meeting adjourned.

B. O. DODGE,  
*Secretary*

#### NEWS ITEMS

From the Pasadena *Star* we learn of the return to civilization of Paul E. Popenoe after a nine months' expedition to the region near the head of the Persian Gulf, in search of different strains of the date palm. He is now en route to California with 14,000 date palms. These plants are expected to yield valuable information in regard to the availability of the date in California. They will supplement the collections of Dr. David Fairchild, of the Bureau of Plant Industry, from the same part of Arabia and Persia.

Dr. Edward W. Berry, associate in paleobotany at the Johns Hopkins University, has been elected a member of the Geological Society of France.

On March 25, 1914, Professor A. Engler, of the Royal University of Berlin and director of the Royal Botanical Garden and Museum at Berlin, will celebrate his seventieth birthday. A